

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				2 *****
				3 *
				4 * CCW Incorrect Length Suppression Test
				5 *
				6 *****
				7 *
				8 * This program verifies proper Hercules channel subsystem handling
				9 * of immediate CCWs (e.g. 0x03 NOP CCW) with a non-zero length field
				10 * and WITHOUT the SLI flag set, for both Format-0 and Format-1, and
				11 * both with and without the ORB 'L' Incorrect Length Suppression Mode
				12 * flag.
				13 *
				14 *****
				15 *
				16 * Example Hercules Testcase:
				17 *
				18 * *Testcase CCW-ILS (CCW Incorrect Length Suppression)
				19 *
				20 * # Prepare test environment
				21 *
				22 * mainsize 1
				23 * numcpu 1
				24 * sysclear
				25 * archlvl z/Arch
				26 * detach 390
				27 * attach 390 3390 "\$(testpath)/CCWILS.3390-1.comp-z"
				28 * loadcore "\$(testpath)/CCW-ILS.core"
				29 *
				30 * t+390 # (trace device CCWs)
				31 * o+390 # (trace device ORBs)
				32 *
				33 * # Run the test...
				34 * runtest 0.25 # (plenty of time)
				35 *
				36 *
				37 * # Clean up afterwards
				38 * detach 390 # (no longer needed)
				39 *
				40 * *Compare
				41 * r FFF.1
				42 * *Want "Ending test number" 03
				43 *
				44 * *Done
				45 *
				46 *****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				48 PRINT OFF
				3429 PRINT ON
				3431 *****
				3432 * SATK prolog stuff...
				3433 *****
				3435 ARCHLVL MNOTE=NO
				3437+\$AL OPSYN AL
				3438+\$ALR OPSYN ALR
				3439+\$B OPSYN B
				3440+\$BAS OPSYN BAS
				3441+\$BASR OPSYN BASR
				3442+\$BC OPSYN BC
				3443+\$BCTR OPSYN BCTR
				3444+\$BE OPSYN BE
				3445+\$BH OPSYN BH
				3446+\$BL OPSYN BL
				3447+\$BM OPSYN BM
				3448+\$BNE OPSYN BNE
				3449+\$BNH OPSYN BNH
				3450+\$BNL OPSYN BNL
				3451+\$BNM OPSYN BNM
				3452+\$BNO OPSYN BNO
				3453+\$BNP OPSYN BNP
				3454+\$BNZ OPSYN BNZ
				3455+\$BO OPSYN BO
				3456+\$BP OPSYN BP
				3457+\$BXLE OPSYN BXLE
				3458+\$BZ OPSYN BZ
				3459+\$CH OPSYN CH
				3460+\$L OPSYN L
				3461+\$LH OPSYN LH
				3462+\$LM OPSYN LM
				3463+\$LPSW OPSYN LPSW
				3464+\$LR OPSYN LR
				3465+\$LTR OPSYN LTR
				3466+\$NR OPSYN NR
				3467+\$SL OPSYN SL
				3468+\$SLR OPSYN SLR
				3469+\$SR OPSYN SR
				3470+\$ST OPSYN ST
				3471+\$STM OPSYN STM
				3472+\$X OPSYN X
				3473+\$AHI OPSYN AHI
				3474+\$B OPSYN J
				3475+\$BC OPSYN BRC
				3476+\$BE OPSYN JE
				3477+\$BH OPSYN JH
				3478+\$BL OPSYN JL
				3479+\$BM OPSYN JM
				3480+\$BNE OPSYN JNE



LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3513 *****
				3514 * Initiate the CCWILS CSECT in the CODE region
				3515 * with the location counter at 0
				3516 *****
				3518 CCWILS ASALOAD REGION=CODE
		00000000	00000FFF	3519+CCWILS START 0, CODE
00000000	00020000	00000000		3521+ PSW 0,0,2,0,X'008' 64-bit Restart ISR Trap New PSW
00000010		00000010	00000058	3522+ ORG CCWILS+X'058'
00000058	00020000	00000000		3524+ PSW 0,0,2,0,X'018' 64-bit External ISR Trap New PSW
00000068	00020000	00000000		3525+ PSW 0,0,2,0,X'020' 64-bit Supervisor Call ISR Trap New PSW
00000078	00020000	00000000		3526+ PSW 0,0,2,0,X'028' 64-bit Program ISR Trap New PSW
00000088	00020000	00000000		3527+ PSW 0,0,2,0,X'030' 64-bit Machine Check Trap New PSW
00000098	00020000	00000000		3528+ PSW 0,0,2,0,X'038' 64-bit Input/Output Trap New PSW
000000A8		000000A8	000001A0	3529+ ORG CCWILS+X'1A0'
000001A0	00020000	00000000		3531+ PSWZ 0,0,2,0,X'120' Restart ISR Trap New PSW
000001B0	00020000	00000000		3532+ PSWZ 0,0,2,0,X'130' External ISR Trap New PSW
000001C0	00020000	00000000		3533+ PSWZ 0,0,2,0,X'140' Supervisor Call ISR Trap New PSW
000001D0	00020000	00000000		3534+ PSWZ 0,0,2,0,X'150' Program ISR Trap New PSW
000001E0	00020000	00000000		3535+ PSWZ 0,0,2,0,X'160' Machine Check Trap New PSW
000001F0	00020000	00000000		3536+ PSWZ 0,0,2,0,X'170' Input/Output Trap New PSW
				3538 *****
				3539 * Define the z/Arch RESTART PSW
				3540 *****
		00000200	00000001	3542 PREVORG EQU *
00000200		00000200	000001A0	3543 ORG CCWILS+X'1A0'
				3544 * PSWZ <sys>,<key>,<mwp>,<prog>,<addr>[, amode]
000001A0	00000001	80000000		3545 PSWZ 0,0,0,0,X'200',64
000001B0		000001B0	00000200	3546 ORG PREVORG
				3548 *****
				3549 * Create IPL (restart) PSW
				3550 *****
				3552 ASAIPL IA=BEGIN
		00000000	00000FFF	3553+CCWILS CSECT
00000200		00000200	00000000	3554+ ORG CCWILS
00000000	00080000	00000200		3555+ PSWE390 0,0,0,0,BEGIN,24
00000008		00000008	00000200	3556+ ORG CCWILS+512 Reset CSECT to end of assigned storage area
		00000000	00000FFF	3557+CCWILS CSECT

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3559 *****
				3560 * The actual CCWILS program itself...
				3561 *****
				3562 *
				3563 * Architecture Mode: z/Arch
				3564 * Addressing Mode: 64-bit
				3565 * Register Usage:
				3566 *
				3567 * R0 (work)
				3568 * R1 I/O device used by ENADEV and RAWIO macros
				3569 * R2 Program base register
				3570 * R3 IOCB pointer for ENADEV and RAWIO macros
				3571 * R4 IO work register used by ENADEV and RAWIO
				3572 * R5 Used for CPU register when signaling architecture change
				3573 * R6,R7 Signaling registers when changing architecture
				3574 * R8 ORB pointer
				3575 * R9 SCSW pointer
				3576 * R10-R15 (work)
				3577 *
				3578 *****
00000200		00000000		3580 USING ASA,R0 Low core addressability
00000200		00000200		3581 USING BEGIN,R2 Program Addressability
00000200		00000000		3582 USING IOCB,R3 SATK Device I/O Control Block
00000200		00000000		3583 USING ORB,R8 ESA/390 Operation Request Block
00000200		00000000		3584 USING SCSW,R9 ESA/390 Subchannel Status Word
00000200	0520			3586 BEGIN BALR R2,0 Initalize Base Register
00000202	0620			3587 BCTR R2,0 Initalize Base Register
00000204	0620			3588 BCTR R2,0 Initalize Base Register
00000206	45E0 20DA		000002DA	3590 BAL R14,INIT Initalize Program
				3591 *
				3592 ** Run the tests...
				3593 *
0000020A	45E0 201A		0000021A	3594 BAL R14,TEST01 Format-0
0000020E	45E0 205A		0000025A	3595 BAL R14,TEST02 Format-1, without ORB ILS flag
00000212	45E0 209A		0000029A	3596 BAL R14,TEST03 Format-1, with ORB ILS flag
				3597 *
00000216	47F0 20F8		000002F8	3598 B EOJ Normal completion









LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3672 *****
				3673 * Program Initialization
				3674 *****
000002DA				3676 INIT DS 0H Program Initialization
000002DA	4130 2244		00000444	3678 LA R3,IOCB_390 Point to IOCB
000002DE	E380 3018 0004		00000018	3679 \$L R8,IOCBORB Point to ORB
000002E4	E3F0 3020 0004		00000020	3680 \$L R15,IOCBIRB Point to IRB
000002EA		00000000		3681 USING IRB,R15 Temporary addressability
000002EA	4190 F000		00000000	3682 LA R9,IRBSCSW Point to SCSW
000002EE				3683 DROP R15 Done with IRB
000002EE	45F0 2138		00000338	3685 BAL R15,IOINIT Initialize the CPU for I/O operations
000002F2	45F0 2146		00000346	3686 BAL R15,ENADEV Enable our device making ready for use
000002F6	07FE			3688 BR R14 Return to caller
				3690 *****
				3691 * Normal completion or Abnormal termination PSWs
				3692 *****
000002F8				3694 EOJ DWAITEND LOAD=YES Normal completion
000002F8	8200 2100		00000300	3696+EOJ DS 0H
00000300	000A0000 00000000			3697+ LPSW DWAT0009
				3698+DWAT0009 PSWE390 0,0,2,0,X'000000'
00000308				3700 FAILDEV DWAIT LOAD=YES, CODE=01 ENADEV failed
00000308	8200 2110		00000310	3701+FAILDEV DS 0H
00000310	000A0000 00010001			3702+ LPSW DWAT0010
				3703+DWAT0010 PSWE390 0,0,2,0,X'010001'
00000318				3705 FAILIO DWAIT LOAD=YES, CODE=02 RAWIO failed
00000318	8200 2120		00000320	3706+FAILIO DS 0H
00000320	000A0000 00010002			3707+ LPSW DWAT0011
				3708+DWAT0011 PSWE390 0,0,2,0,X'010002'
00000328				3710 FAILTEST DWAIT LOAD=YES, CODE=BAD Abnormal termination
00000328	8200 2130		00000330	3711+FAILTEST DS 0H
00000330	000A0000 00010BAD			3712+ LPSW DWAT0012
				3713+DWAT0012 PSWE390 0,0,2,0,X'010BAD'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3715 *****
				3716 * Initialize the CPU for I/O operations
				3717 *****
				3719 IOINIT IOINIT ,
00000338	B766 2140		00000340	3720+IOINIT LCTL 6,6,IOMK0013 Enable subchannel subclasses for interruptions
0000033C	47F0 2144		00000344	3721+ B IOMK0013+4
00000340				3722+IOMK0013 DS 0F
00000340	FF000000			3723+ DC XL4'FF000000' All subchannel subclasses enabled
00000344	07FF			3724 BR R15 Return to caller
				3726 *****
				3727 * Enable the device, making it ready for use
				3728 *****
				3730 ENADEV ENADEV ENAOKAY,FAILDEV,REG=4
00000346	5810 2190		00000390	3731+ENADEV L 1,FIND0014
0000034A	E340 3028 0004		00000028	3732+ \$L 4,IOCBSIB Locate where the SCHIB is to be stored
00000350		00000000		3733+ USING SCHIB,4
00000350				3734+FINL0014 DS 0H Retrieve Subchannel Information Block for desired device number
00000350	B234 4000		00000000	3735+ STSCH 0(4) Store the SCHIB for first subchannel
00000354	A774 FFDA		00000308	3736+ \$BC B'0111',FAILDEV Subchannel does not exist and device number not found
00000358	9101 4005		00000005	3737+ TM PMCW1_8,PMCWV Is the subchannel device number valid?
0000035C	A784 0011		0000037E	3738+ \$BZ FINN0014 ..No, check the next subchannel
00000360	D501 4006 3004	00000006	00000004	3739+ CLC PMCWDNUM,IOCBDEV Is this the device number being sought?
00000366	A774 000C		0000037E	3740+ \$BNE FINN0014 ..No, check the next subchannel
				3741+* Subchannel found!
0000036A	5010 3000		00000000	3742+ ST 1,IOCBIDID Remember the subchannel so I/O can be done to it.
0000036E	9680 4005		00000005	3743+ OI PMCW1_8,PMCWE Make sure it is enabled so I/O requests accepted
00000372	B232 4000		00000000	3744+ MSCH 0(4) Enable the subchannel to the channel sub-system
00000376	A784 0011		00000398	3745+ \$BC B'1000',ENAOKAY CC0 (SCHIB updated), device is ready.
0000037A	A7F4 FFC7		00000308	3746+ \$B FAILDEV CC1,CC2,CC3 (SCHIB update failed), quit
0000037E				3747+FINN0014 DS 0H Advance to next subchannel
0000037E	4110 1001		00000001	3748+ LA 1,1(0,1) Advance to next subchannel
00000382	5510 2194		00000394	3749+ CL 1,FINM0014 Beyond maximum subchannel
00000386	A7D4 FFE5		00000350	3750+ \$BNH FINL0014 ..No, examine the next subchannel
0000038A	A724 FFBF		00000308	3751+ \$BH FAILDEV ..Yes, failed to enable the device
0000038E				3752+ DROP 4 Forget SCHIB addressing
00000390	00010000			3753+FIND0014 DC A(X'00010000') First subchannel subsystem ID
00000394	0001FFFF			3754+FINM0014 DC A(X'0001FFFF') Last subchannel subsystem ID
				3755 *
00000398	07FF			3756 ENAOKAY BR R15 Return to caller if device enabled OK

LOC	OBJECT	CODE	ADDR1	ADDR2	STMT	
					3758 *****	
					3759 * Execute the channel program pointed to by R0	
					3760 *****	
0000039A	5000	8008		00000008	3762 EXCP ST R0,ORBCCW Plug Channel Program address into IORB	
					3764 RAWIO 4,FAIL=FAILIO	
0000039E	9200	300E		0000000E	3765+ MVI IOCBSC,X'00' Clear SC information	
000003A2	D201	300A	3006	0000000A	3766+ MVC IOCBST,IOCBZERO Clear accumulated status	
000003A8	5810	3000		00000000	3767+ L 1,IOCBDID Remember the device ID with which I am working	
					3768+* Initiate Subchannel-based input/output operation	
000003AC	E340	3018	0004	00000018	3769+ \$L 4,IOCBORB Locate the ORB for the channel subsystem	
000003B2	B233	4000		00000000	3770+ SSCH 0(4) Initiate the I/O operation	
000003B6	A774	FFB1		00000318	3771+ \$BC B'0111',FAILIO ..Start function failed, report/handle the error	
000003BA	E340	3020	0004	00000020	3772+ \$L 4,IOCBIRB Locate the IRB storage area	
000003C0			00000000		3773+ USING IRB,4 Make it addressable	
					3775+* Wait for I/O operation to present status via an interruption	
000003C0					3776+IOWT0015 DS 0H Wait for I/O to complete	
000003C0	D20F	21F0	01F0	000003F0	000001F0	3778+ MVC IOS0016(16),496(0) Save Input/Output new PSW
000003C6	D20F	01F0	21E0	000001F0	000003E0	3779+ MVC 496(16,0),ION0016 Establish Input/Output new PSW
000003CC	B2B2	21D0		000003D0		3780+ \$LPSW WPSW0016 Wait for event
000003D0	02020000	00000000				3781+WPSW0016 PSW 2,0,2,0,0 Wait for event
000003E0	00002000	00000000				3782+ION0016 PSW 0,0,0,32,IRST0016,24 I/O New PSW: cc==2
000003F0	00000000	00000000				3783+IOS0016 DC XL16'00'
						3784+* Handle input/output interruption
00000400						3785+IRST0016 DS 0H
00000400	D20F	01F0	21F0	000001F0	000003F0	3786+ MVC 496(16,0),IOS0016 Restore input/output new PSW
						3787+* Process the interruption...
						3788+* Validate interruption is for the expected subchannel
00000406	5510	00B8		000000B8		3789+ CL 1,IOSSID Is this the device for which I am waiting?
0000040A	A774	FFDB		000003C0		3790+ \$BNE IOWT0015 ..No, continue waiting for it
						3791+* Accumulate interruption information from IRB
0000040E	B235	4000		00000000		3792+ TSCH 0(4) Retrieve interrupt information
00000412	A744	FFD7		000003C0		3793+ \$BC B'0100',IOWT0015 CC1 (not status pending), wait for it to arrive
00000416	A714	FF81		00000318		3794+ \$BC B'0001',FAILIO CC3 (not operational), an error then
						3795+* CC0 (status was pending), accumulate the status
0000041A	D600	300E	4003	0000000E	00000003	3796+ OC IOCBSC,IRBSCSW+SCSW2 Accumulate status control
00000420	D601	300A	4008	0000000A	00000008	3797+ OC IOCBST,IRBSCSW+SCSWUS Accumulate device and channel status
00000426	9104	300E		0000000E		3798+ TM IOCBSC,SCSWSPRI Primary subchannel status?
0000042A	A7E4	FFCB		000003C0		3799+ \$BNO IOWT0015 ..No, wait for primary status
0000042E	D203	3010	4004	00000010	00000004	3800+ MVC IOCBSCCW,IRBSCSW+SCSWCCW CCW address
00000434	D201	3016	400A	00000016	0000000A	3801+ MVC IOCBRCNT,IRBSCSW+SCSWCNT Residual count
						3802+* Test for errors as specified in the IOCB
0000043A	910C	300A		0000000A		3803+ TM IOCBUS,CSWCE+CSWDE Channel end and device end both accumulated?
0000043E	A7E4	FF6D		00000318		3804+ \$BNO FAILIO Hunh? No CE and DE but do have primary status!
						3805+* Input/Output operation successful
00000442	07FF				3807	BR R15 Return to caller

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				3809 *****	
				3810 *           Structure used by RAWIO identifying	
				3811 *           the device and operation being performed	
				3812 *****	
				3814 IOCB_390 IOCB X'390'	
00000444	00000000			3815+IOCB_390 DC A(0)	+0 Device Identifier (supplied by ENADEV macro)
00000448	0390			3816+           DC AL2(X'390')	+4 Device address or device number
0000044A	0000			3817+           DC H'0'	+6 Must be zeros
0000044C	D3			3818+           DC AL1(X'D3')	+8 Default detected unit errors
0000044D	3F			3819+           DC AL1(X'3F')	+9 Default detected channel errors
0000044E	0000			3820+           DC HL2'0'	+10 Accumulated unit and channel errors
00000450	0000			3821+           DC HL2'0'	+12 Tested unit and channel status
00000452	00			3822+           DC XL1'00'	+14 Accumulated subchannel status control from SCSW
00000453	80			3823+           DC XL1'80'	+15 Default unsolicited wait condition
00000454	00000000			3824+           DC F'0'	+16 I/O status CCW address
00000458	00000000			3825+           DC F'0'	+20 residual count
0000045C	00000000	000004D4		3826+           DC ADL8(IORB0017)	+24 Address where ORB is located
00000464	00000000	00000474		3827+           DC ADL8(IIRB0017)	+32 Address where IRB stored
0000046C	00000000	00000474		3828+           DC ADL8(IIRB0017)	+40 Address where SCHIB stored
00000474	00000000	00000000		3829+IIRB0017 DC 24F'0'	Embedded shared IRB and SCHIB area
000004D4				3831+IORB0017 DS 0XL12	
000004D4	00000000			3832+           DC A(0)	Word 0 - Interruption Parameter
000004D8	00			3833+           DC AL1((0)*16+B'0000')	Word 1, bits 0-7
000004D9	80			3834+           DC BL1'10000000'	Word 1, bits 8-15
000004DA	FF			3835+           DC AL1(255)	Word 1, bits 16-23
000004DB	00			3836+           DC BL1'00000000'	Word 1, bits 24-31
000004DC	00000000			3837+           DC AL4(0)	Word 2 - CCW address





LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				3883 *****
				3884 * IOCB DSECT
				3885 *****
				3887 DSECTS NAME=IOCB
				3889+IOCB DSECT
				3890+* Field usage by: CH SC Description (R->program read-only, X->program read/write)
00000000				3891+IOCBID DS 0F +0 R Device Identifier - Subsystem ID for channel subsystem
00000000	0000			3892+ DS H +0 R reserved - must be zeros
00000002	0000			3893+IOCBDEV DS H +2 R Channel Unit Device address of I/O operation
00000004	0000			3894+IOCBDEV DS H +4 X X Device address or device number (R after ENADEV)
00000006	0000			3895+IOCBZERO DS H +6 R R Must be zeros
00000008	00			3896+IOCBUM DS X +8 X X Unit status test mask
00000009	00			3897+IOCBCM DS X +9 X X Channel status test mask
0000000A				3898+IOCBST DS 0H +10 X X Input/Output unit and channel status accumulation
0000000A	00			3899+IOCBUS DS X +10 R R Accumulated unit status
0000000B	00			3900+IOCBCS DS X +11 R R Accumulated channel status
0000000C	00			3901+IOCBUT DS X +14 R R Used to test unit status
0000000D	00			3902+IOCBCT DS X +13 R R Used to test channel status
0000000E	00			3903+IOCBSC DS X +14 R Accumulted subchannel status control
0000000F	00			3904+IOCBWAIT DS X +15 X X Recognized unsolicited interruption unit status events
00000010	00000000			3905+IOCBSCCW DS A +16 R R I/O status CCW address
00000014				3906+IOCBSCNT DS 0F +20 R R I/O status residual count as a positive full word
00000014	0000			3907+ DS H +20 R reserved must be zeros
00000016	0000			3908+IOCBRCNT DS H +22 R I/O status residual count as an unsigned halfword
00000018				3909+IOCBCAW DS 0A +24 X Channel Address word
00000018	00000000 00000000			3910+IOCBORB DS AD +24 X Address of the ORB for channel subsystem I/O
00000020	00000000 00000000			3911+IOCBIRB DS AD +32 X Channel subsystem IRB address
00000028	00000000 00000000			3912+IOCBSIB DS AD +40 X Channel subsystem SCHIB address
		00000030	00000001	3913+IOCB EQU *-IOCB Length of IOCB control block (48) without embedded structures



LOC	OBJECT CODE	ADDR1	ADDR2	STMT					
				3915	*****				
				3916	*	ORB DSECT			
				3917	*****				
				3919	DSECTS NAME=ORB				
00000000	00000000			3921+ORB	DSECT				
				3922+ORBPARM	DC	F'0'	Word 0, bits 0-31		
00000004	00			3924+ORB1_0	DC	X'00'	Word 1, bits 0-7		
		000000F0	00000001	3925+ORBKEYM	EQU	X'F0'	Word 1, bits 0-3	- Storage Key Mask	
		00000008	00000001	3926+ORBS	EQU	X'08'	Word 1, bit 4	- Suspend Control	
		00000004	00000001	3927+ORBC	EQU	X'04'	Word 1, bit 5	- Streaming Mode Control	
		00000002	00000001	3928+ORBM	EQU	X'02'	Word 1, bit 6	- Modification Control	
		00000001	00000001	3929+ORBY	EQU	X'01'	Word 1, bit 7	- Synchronization Control	
00000005	00			3931+ORB1_8	DC	X'00'	Word 1, bits 8-15		
		00000080	00000001	3932+ORBF	EQU	X'80'	Word 1, bit 8	- CCW Format-Control	
		00000040	00000001	3933+ORBP	EQU	X'40'	Word 1, bit 9	- Pre-fetch control	
		00000020	00000001	3934+ORBI	EQU	X'20'	Word 1, bit 10	- Initial-status Interruption Control	
		00000010	00000001	3935+ORBA	EQU	X'10'	Word 1, bit 11	- Address Limit Checking Control	
		00000008	00000001	3936+ORBU	EQU	X'08'	Word 1, bit 12	- Suppress-suspended-interruption control	
		00000004	00000001	3937+ORBB	EQU	X'04'	Word 1, bit 13	- Channel-Program-Type Control	
		00000002	00000001	3938+ORBH	EQU	X'02'	Word 1, bit 14	- Format 2-IDAW Control	
		00000001	00000001	3939+ORBT	EQU	X'01'	Word 1, bit 15	- 2K-IDAW control	
00000006	00			3940+ORBLPM	DC	X'00'	Word 1, bits 16-23	- Logical Path Mask	
00000007	00			3941+ORRB1_24	DC	X'00'	Word 1, bits 24-31		
		00000080	00000001	3942+ORBL	EQU	X'80'	Word 1, bit 24	- Incorrect Length Suppression Mode	
		0000007F	00000001	3943+ORBRSV3	EQU	X'7F'	Word 1, bits 25-31	- reserved must be zeros	
		00000040	00000001	3944+ORBD	EQU	X'40'	Word 1, bit 25	- MIDAW Addressing Control	
		0000003E	00000001	3945+ORBRSV26	EQU	X'3E'	Word 1, bits 26-30	- reserved must be zeros	
		0000007E	00000001	3946+ORBRSV25	EQU	X'7E'	Word 1, bits 25-30	- reserved must be zeros	
		00000001	00000001	3947+ORBX	EQU	X'01'	Word 1, bit 31	- ORB-extension control	
00000008	00000000			3949+ORBCCW	DC	A(0)	Word 2, bits 1-31	- Channel Program Address	
		00000080	00000001	3950+ORBRSV4	EQU	X'80'	Word 2, bit 0	- reserved must be zero	
		0000000C	00000001	3951+ORBLEN	EQU	*-ORB Length of standard ORB			
				3952+*	Extended ORB fields				
0000000C	00			3953+ORBCSS	DC	X'00'	Word 3, bits 0-7	- Channel Subsystem Priority	
0000000D	00			3954+ORBRSV5	DC	X'00'	Word 3, bits 8-15	- reserved must be zeros	
0000000E				3955+ORBPGM	DC	0X'00'	Word 3, bits 16-23	- Transport mode reserves for program use	
0000000E	00			3956+ORBCU	DC	X'00'	Word 3, bits 16-23	- Control Unit Priority	
0000000F	00			3957+ORBRSV6	DC	X'00'	Word 3, bits 24-31	- reserved must be zeros	
00000010	00000000 00000000			3958+ORBRSV7	DC	XL16'00'	Words 4-7	- reserved must be zeros	
		00000020	00000001	3959+ORBXLEN	EQU	*-ORB Length of extended ORB			





LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				3977	*****	
				3978	* SCSW DSECT	
				3979	*****	
				3981	DSECTS NAME=SCSW	
00000000	00			3983+SCSW	DSECT Subchannel	Status Word
		000000F0	00000001	3984+SCSWFLAG	DC X'00'	Flags
		00000008	00000001	3985+SCSWKEYM	EQU X'F0'	Storage Key Mask of subchannel storage key
		00000004	00000001	3986+SCSWUSC	EQU X'08'	Suspend Control
		00000003	00000001	3987+SCSWESWF	EQU X'04'	Extended Status Word Format
		00000000	00000001	3988+SCSWDCCM	EQU X'03'	Deferred condiont code mask
		00000001	00000001	3989+SCSWDCC0	EQU X'00'	Normal I/O interruption
		00000003	00000001	3990+SCSWDCC1	EQU X'01'	Deferred condition code is 1
				3991+SCSWDCC3	EQU X'03'	Deferred condition code is 3
00000001	00			3993+SCSWCTLS	DC X'00'	General Controls
		00000080	00000001	3994+SCSWCCWF	EQU X'80'	CCW Format control when ...
		00000040	00000001	3995+SCSWCCWP	EQU X'40'	CCW Prefetch Control
		00000020	00000001	3996+SCSWISIC	EQU X'20'	Initial-Status-Interruption Control
		00000010	00000001	3997+SCSWALKC	EQU X'10'	Address-Limit-Checking Control
		00000008	00000001	3998+SCSWSSIC	EQU X'08'	Suppress suspended interruption
		00000004	00000001	3999+SCSW0CC	EQU X'04'	Zero-Condition Code
		00000002	00000001	4000+SCSWECWC	EQU X'02'	Extended Control Word control
		00000001	00000001	4001+SCSWPNOP	EQU X'01'	Path Not Operational
00000002	00			4003+SCSW1	DC X'00'	Control Byte 1
		00000070	00000001	4004+SCSWFM	EQU X'70'	Functional Control Mask
		00000040	00000001	4005+SCSWFS	EQU X'40'	Function Control - Start Function
		00000020	00000001	4006+SCSWFH	EQU X'20'	Function Control - Halt Function
		00000010	00000001	4007+SCSWFC	EQU X'10'	Function Control - Clear Function
		00000008	00000001	4008+SCSWARP	EQU X'08'	Activity Control - Resume pending
		00000004	00000001	4009+SCSWASP	EQU X'04'	Activity Control - Start pending
		00000002	00000001	4010+SCSWAHP	EQU X'02'	Activity Control - Halt pending
		00000001	00000001	4011+SCSWACP	EQU X'01'	Activity Control - Clear pending
00000003	00			4012+SCSW2	DC X'00'	Control Byte 2
		00000080	00000001	4013+SCSWASA	EQU X'80'	Activity Control - Subchannel Active
		00000040	00000001	4014+SCSWADA	EQU X'40'	Activity Control - Device Active
		00000020	00000001	4015+SCSWASUS	EQU X'20'	Activity Control - Suspended
		00000010	00000001	4016+SCSWASAS	EQU X'10'	Status Control - Alert Status
		00000008	00000001	4017+SCSWSINT	EQU X'08'	Status Control - Intermediate Status
		00000004	00000001	4018+SCSWSPRI	EQU X'04'	Status Control - Primary Status
		00000002	00000001	4019+SCSWSSEC	EQU X'02'	Status Control - Secondary Status
		00000001	00000001	4020+SCSWSPEN	EQU X'01'	Status Control - Status Pending
00000004	00000000			4022+SCSWCCW	DC A(0)	CCW Address
00000008	00			4024+SCSWUS	DC X'00'	Unit Status
		00000080	00000001	4025+SCSWATTN	EQU X'80'	Attention
		00000040	00000001	4026+SCSWSM	EQU X'40'	Status modifier
		00000020	00000001	4027+SCSWCUE	EQU X'20'	Control-unit end
		00000010	00000001	4028+SCSWBUSY	EQU X'10'	Busy
		00000008	00000001	4029+SCSWCE	EQU X'08'	Channel end



LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				4048 *****
				4049 * (other DSECTS needed by SATK)
				4050 *****
				4052 DSECTS PRINT=OFF,NAME=(ASA,SCHIB,CCW0,CCW1,CSW)
				4328 PRINT ON
				4330 *****
				4331 * Register equates
				4332 *****
		00000000	00000001	4334 R0 EQU 0
		00000001	00000001	4335 R1 EQU 1
		00000002	00000001	4336 R2 EQU 2
		00000003	00000001	4337 R3 EQU 3
		00000004	00000001	4338 R4 EQU 4
		00000005	00000001	4339 R5 EQU 5
		00000006	00000001	4340 R6 EQU 6
		00000007	00000001	4341 R7 EQU 7
		00000008	00000001	4342 R8 EQU 8
		00000009	00000001	4343 R9 EQU 9
		0000000A	00000001	4344 R10 EQU 10
		0000000B	00000001	4345 R11 EQU 11
		0000000C	00000001	4346 R12 EQU 12
		0000000D	00000001	4347 R13 EQU 13
		0000000E	00000001	4348 R14 EQU 14
		0000000F	00000001	4349 R15 EQU 15
				4351 END

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
ASA	4	000000	512	4056	3580
ASBEGIN	U	000000	1	4057	4062 4104 4140 4149 4167 4174 4180 4184 4188 4194 4211
ASEND	U	000200	1	4210	4211
ASLENGTH	U	000200	1	4211	
BADRSLT	X	000810	4	3876	3644
BCEXTCOD	H	00001A	2	4074	
BCIOCOD	H	00003A	2	4082	
BCMCKCOD	H	000032	2	4080	
BCPGMCOD	H	00002A	2	4078	
BCSVCCOD	H	000022	2	4076	
BEGIN	I	000200	2	3586	3555 3581
CAW	F	000048	4	4086	
CAWADDR	R	000049	3	4089	
CAWKEY	X	000048	1	4087	
CAWSUSP	U	000008	1	4088	
CCW0	4	000000	8	4215	4221
CCW0ADDR	R	000001	3	4217	
CCW0CNT	H	000006	2	4220	
CCW0CODE	X	000000	1	4216	
CCW0FLGS	X	000004	1	4218	
CCW0L	U	000008	1	4221	
CCW1	4	000000	8	4233	4238
CCW1ADDR	A	000004	4	4237	
CCW1CNT	H	000002	2	4236	
CCW1CODE	X	000000	1	4234	
CCW1FLGS	X	000001	1	4235	
CCW1L	U	000008	1	4238	
CCWCC	U	000040	1	4225	
CCWCD	U	000080	1	4224	
CCWIDA	U	000004	1	4229	
CCWILS	J	000000	4096	3519	3522 3529 3543 3554 3556 3855 3865 3879
CCWPCI	U	000008	1	4228	
CCWSKIP	U	000010	1	4227	
CCWSLI	U	000020	1	4226	
CCWSUSP	U	000002	1	4230	
CHANID	F	0000A8	4	4141	
CODE	2	000000	4096	3519	
CPUID	U	00031B	1	4213	
CSW	F	000040	8	4085	
CSWATTN	U	000080	1	4255	
CSWBUSY	U	000010	1	4258	
CSWCCTL	U	000004	1	4270	
CSWCCW	R	000001	3	4252	
CSWCDAT	U	000008	1	4269	
CSWCE	U	000008	1	4259	3803
CSWCHNG	U	000001	1	4272	
CSWCNT	H	000006	2	4274	
CSWCS	X	000005	1	4264	
CSWCUE	U	000020	1	4257	
CSWDCC0	U	000000	1	4248	
CSWDCC1	U	000001	1	4249	
CSWDCC3	U	000003	1	4250	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
CSWDCCM	U	000003	1	4247	
CSWDE	U	000004	1	4260	3803
CSWFLAG	X	000000	1	4242	
CSWFMT	4	000000	8	4241	4275
CSWFMTL	U	000008	1	4275	
CSWICTL	U	000002	1	4271	
CSWIL	U	000040	1	4266	
CSWKEYM	U	0000F0	1	4243	
CSWLOG	U	000004	1	4246	
CSWPCI	U	000080	1	4265	
CSWPRGM	U	000020	1	4267	
CSWPROT	U	000010	1	4268	
CSWSM	U	000040	1	4256	
CSWSUSP	U	000008	1	4245	
CSWUC	U	000002	1	4261	
CSWUS	X	000004	1	4254	
CSWUX	U	000001	1	4262	
DWAT0009	3	000300	8	3698	3697
DWAT0010	3	000310	8	3703	3702
DWAT0011	3	000320	8	3708	3707
DWAT0012	3	000330	8	3713	3712
ENADEV	I	000346	4	3731	3686
ENAOKAY	I	000398	2	3756	3745
EOJ	H	0002F8	2	3696	3598
EXCP	I	00039A	4	3762	3613 3637 3661
EXTCPUAD	H	000084	2	4106	
EXTICODE	H	000086	2	4107	
EXTIPARM	F	000080	4	4105	
EXTNPSW	F	000058	8	4095	
EXTOPSW	F	000018	8	4067	4073
FAILDEV	H	000308	2	3701	3736 3746 3751
FAILIO	H	000318	2	3706	3771 3794 3804
FAILTEST	H	000328	2	3711	3621 3645 3669
FIND0014	A	000390	4	3753	3731
FINL0014	H	000350	2	3734	3750
FINM0014	A	000394	4	3754	3749
FINN0014	H	00037E	2	3747	3738 3740
GOODRSLT	X	000808	4	3873	3620 3668
HEX500	U	000500	1	3847	3855 3859
IIRB0017	F	000474	4	3829	3827 3828
IMAGE	1	000000	4096	0	
INIT	H	0002DA	2	3676	3590
IOCB	4	000000	48	3889	3913 3582
IOCBCAW	A	000018	4	3909	
IOCBCM	X	000009	1	3897	
IOCBCS	X	00000B	1	3900	
IOCBCT	X	00000D	1	3902	
IOCBDEV	H	000004	2	3894	3739
IOCBDID	F	000000	4	3891	3742 3767
IOCBDV	H	000002	2	3893	
IOCBIRB	A	000020	8	3911	3680 3772
IOCBL	U	000030	1	3913	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES		
IOCBORB	A	000018	8	3910	3679	3769	
IOCBRCNT	H	000016	2	3908	3801		
IOCBSC	X	00000E	1	3903	3765	3796	3798
IOCBSCCW	A	000010	4	3905	3800		
IOCBSCNT	F	000014	4	3906			
IOCBSIB	A	000028	8	3912	3732		
IOCBST	H	00000A	2	3898	3766	3797	
IOCBUM	X	000008	1	3896			
IOCBUS	X	00000A	1	3899	3803		
IOCBUT	X	00000C	1	3901			
IOCBWAIT	X	00000F	1	3904			
IOCBZERO	H	000006	2	3895	3766		
IOCB_390	A	000444	4	3815	3678		
IOELADDR	F	0000AC	4	4142			
IOICODE	H	0000BA	2	4147			
IOIID	F	0000C0	4	4152			
IOINIT	I	000338	4	3720	3685		
IOIPARM	F	0000BC	4	4151			
IOMK0013	F	000340	4	3722	3720	3721	
ION0016	U	0003E0	16	3782	3779		
IONPSW	F	000078	8	4099			
IOOPSW	F	000038	8	4071	4081		
IORB0017	X	0004D4	12	3831	3826		
IOS0016	X	0003F0	16	3783	3778	3786	
IOSSID	F	0000B8	4	4150	3789		
IOWT0015	H	0003C0	2	3776	3790	3793	3799
IPLCCW1	F	000008	8	4059			
IPLCCW2	F	000010	8	4060			
IPLPSW	F	000000	8	4058			
IRB	4	000000	96	3968	3972	3974	3681 3773
IRBECW	X	000020	32	3971			
IRBEMW	X	000040	32	3973			
IRBESW	X	00000C	20	3970			
IRBL	U	000040	1	3972			
IRBSCSW	X	000000	12	3969	3682	3796	3797 3800 3801
IRBXL	U	000060	1	3974			
IRST0016	H	000400	2	3785	3782		
K	U	000400	1	3845	3848	3849	
LCHANLOG	F	0000B0	4	4143			
MCKLOG	F	000100	4	4175			
MCKNPSW	F	000070	8	4098			
MCKOPSW	F	000030	8	4070	4079		
MEASUREB	X	0000B9	1	4146			
MKARCHMD	X	0000A3	1	4134			
MKARS	F	000120	4	4173			
MKCLKCMP	F	0000E0	8	4159			
MKCPUTIM	F	0000D8	8	4158			
MKCRS	F	0001C0	4	4178			
MKDMGCOD	F	0000F4	4	4162			
MKFAILA	F	0000F8	4	4164			
MKFPRS	D	000160	8	4176			
MKICODE	F	0000E8	4	4160			

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
MKLOGOUT	F	000100	4	4166	
MKMODEL	F	0000FC	4	4165	
MKXSAA	F	0000D4	4	4157	
MONCLS	H	000094	2	4122	
MONCODE	F	00009C	4	4129	
MONNUMBR	X	000095	1	4124	
MPGACCID	X	0000A2	1	4132	
NKGRS	F	000180	4	4177	
NOOP	U	000003	1	3857	3859
NOPPROG	R	000500	1	3859	3612 3636 3660
ORB	4	000000	32	3921	3951 3959 3583
ORB1_0	X	000004	1	3924	
ORB1_8	X	000005	1	3931	3606 3609 3630 3633 3654 3657
ORBA	U	000010	1	3935	
ORBB	U	000004	1	3937	
ORBC	U	000004	1	3927	
ORBCCW	A	000008	4	3949	3762
ORBCSS	X	00000C	1	3953	
ORBCU	X	00000E	1	3956	
ORBD	U	000040	1	3944	
ORBF	U	000080	1	3932	3609 3633 3657
ORBH	U	000002	1	3938	
ORBI	U	000020	1	3934	
ORBKEYM	U	0000F0	1	3925	
ORBL	U	000080	1	3942	3610 3634 3658
ORBLLEN	U	00000C	1	3951	
ORBLPM	X	000006	1	3940	
ORBM	U	000002	1	3928	
ORBP	U	000040	1	3933	
ORBPARM	F	000000	4	3922	
ORBPGM	X	00000E	1	3955	
ORBRV25	U	00007E	1	3946	
ORBRV26	U	00003E	1	3945	
ORBRV3	U	00007F	1	3943	
ORBRV4	U	000080	1	3950	
ORBRV5	X	00000D	1	3954	
ORBRV6	X	00000F	1	3957	
ORBRV7	X	000010	16	3958	
ORBS	U	000008	1	3926	
ORBT	U	000001	1	3939	
ORBU	U	000008	1	3936	
ORBX	U	000001	1	3947	
ORBXLEN	U	000020	1	3959	
ORBY	U	000001	1	3929	
ORRB1_24	X	000007	1	3941	3607 3610 3631 3634 3655 3658
PCFETO	A	0000C4	4	4153	
PERACCID	X	0000A1	1	4131	
PERADDR	F	000098	4	4128	
PERCODE	X	000096	1	4125	
PERCODMK	U	0000F0	1	4126	
PGMACCID	X	0000A0	1	4130	
PGMDXC	F	000090	4	4120	



SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
PGMICODE	H	00008E	2	4119													
PGMIID	F	00008C	4	4115													
PGMIILC	X	00008D	1	4117													
PGMIILCM	U	00000C	1	4118													
PGMNPSW	F	000068	8	4097													
PGMOPSW	F	000028	8	4069	4077												
PGMTRX	F	000090	4	4121													
PMCW1_0	X	000004	1	4282													
PMCW1_8	X	000005	1	4285	3737	3743											
PMCWB	U	000004	1	4317													
PMCWCHP0	X	000010	1	4306													
PMCWCHP1	X	000011	1	4307													
PMCWCHP2	X	000012	1	4308													
PMCWCHP3	X	000013	1	4309													
PMCWCHP4	X	000014	1	4310													
PMCWCHP5	X	000015	1	4311													
PMCWCHP6	X	000016	1	4312													
PMCWCHP7	X	000017	1	4313													
PMCWDNUM	H	000006	2	4297	3739												
PMCWE	U	000080	1	4286	3743												
PMCWEXC	X	00001B	1	4316													
PMCWIP	F	000000	4	4281													
PMCWISCM	U	000038	1	4283													
PMCWLM	U	000060	1	4287													
PMCWLMG	U	000020	1	4288													
PMCWLML	U	000040	1	4289													
PMCWLPM	X	000008	1	4299													
PMCWLPUM	X	00000A	1	4301													
PMCWMM	U	000004	1	4293													
PMCWMBI	H	00000C	2	4303													
PMCWMM	U	000018	1	4290													
PMCWMMC	U	000008	1	4292													
PMCWMMME	U	000010	1	4291													
PMCWPMAM	X	00000F	1	4305													
PMCWPIIM	X	00000B	1	4302													
PMCWPNOM	X	000009	1	4300													
PMCWPOIM	X	00000E	1	4304													
PMCWRES1	X	000018	4	4314													
PMCWRES2	X	000018	3	4315													
PMCWS	U	000001	1	4319													
PMCWT	U	000002	1	4294													
PMCWV	U	000001	1	4295	3737												
PMCWX	U	000002	1	4318													
PREVORG	U	000200	1	3542	3546												
R0	U	000000	1	4334	3580	3612	3636	3660	3762								
R1	U	000001	1	4335													
R10	U	00000A	1	4344													
R11	U	00000B	1	4345													
R12	U	00000C	1	4346													
R13	U	00000D	1	4347													
R14	U	00000E	1	4348	3590	3594	3595	3596	3622	3646	3670	3688					
R15	U	00000F	1	4349	3613	3637	3661	3680	3681	3683	3685	3686	3724	3756	3807		

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES				
R2	U	000002	1	4336	3581	3586	3587	3588	
R3	U	000003	1	4337	3582	3678			
R4	U	000004	1	4338					
R5	U	000005	1	4339					
R6	U	000006	1	4340					
R7	U	000007	1	4341					
R8	U	000008	1	4342	3583	3679			
R9	U	000009	1	4343	3584	3682			
RESLTADR	U	000800	1	3848	3865				
RSTNPSW	F	000000	8	4063					
RSTOPSW	F	000008	8	4064					
SCANOUT	X	000080	1	4101	4102				
SCANOUTL	U	000000	1	4102					
SCHIB	4	000000	52	4278	4325	3733			
SCHIBL	U	000034	1	4325					
SCHMBA	A	000028	8	4323					
SCHMDA1	X	000030	4	4324					
SCHMDA3	X	000028	12	4322					
SCHPMCW	X	000000	28	4280					
SCHSCSW	X	00001C	12	4321					
SCSW	4	000000	12	3983	4045	3584			
SCSW0CC	U	000004	1	3999					
SCSW1	X	000002	1	4003					
SCSW2	X	000003	1	4012	3796				
SCSWACP	U	000001	1	4011					
SCSWADA	U	000040	1	4014					
SCSWAHP	U	000002	1	4010					
SCSWALKC	U	000010	1	3997					
SCSWARP	U	000008	1	4008					
SCSWASA	U	000080	1	4013					
SCSWASP	U	000004	1	4009					
SCSWASUS	U	000020	1	4015					
SCSWATTN	U	000080	1	4025					
SCSWBUSY	U	000010	1	4028					
SCSWCCTL	U	000004	1	4040					
SCSWCCW	A	000004	4	4022	3615	3639	3663	3800	
SCSWCCWF	U	000080	1	3994					
SCSWCCWP	U	000040	1	3995					
SCSWCDAT	U	000008	1	4039					
SCSWCE	U	000008	1	4029	3874	3877			
SCSWCHNG	U	000001	1	4042					
SCSWCNT	H	00000A	2	4044	3618	3642	3666	3801	
SCSWCS	X	000009	1	4034	3617	3641	3665		
SCSWCTLS	X	000001	1	3993					
SCSWCUE	U	000020	1	4027					
SCSWDCC0	U	000000	1	3989					
SCSWDCC1	U	000001	1	3990					
SCSWDCC3	U	000003	1	3991					
SCSWDCCM	U	000003	1	3988					
SCSWDE	U	000004	1	4030	3874	3877			
SCSWECWC	U	000002	1	4000					
SCSWESWF	U	000004	1	3987					

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
SCSWFC	U	000010	1	4007	
SCSWFH	U	000020	1	4006	
SCSWFLAG	X	000000	1	3984	
SCSWFM	U	000070	1	4004	
SCSWFS	U	000040	1	4005	
SCSWICTL	U	000002	1	4041	
SCSWIL	U	000040	1	4036	3877
SCSWISIC	U	000020	1	3996	
SCSWKEYM	U	0000F0	1	3985	
SCSWL	U	00000C	1	4045	
SCSWPCI	U	000080	1	4035	
SCSWPNOP	U	000001	1	4001	
SCSWPRGM	U	000020	1	4037	
SCSWPROT	U	000010	1	4038	
SCSWSAS	U	000010	1	4016	
SCSWSINT	U	000008	1	4017	
SCSWSM	U	000040	1	4026	
SCSWSPEN	U	000001	1	4020	
SCSWSPRI	U	000004	1	4018	3798
SCSWSSSEC	U	000002	1	4019	
SCSWSSIC	U	000008	1	3998	
SCWSUSC	U	000008	1	3986	
SCSWUC	U	000002	1	4031	
SCSWUS	X	000008	1	4024	3616 3640 3664 3797
SCSWUX	U	000001	1	4032	
SSARCHMD	X	0000A3	1	4133	
SSARS	F	000120	4	4189	
SSCLKCMP	F	0000E0	8	4183	
SSCPUTIM	F	0000D8	8	4182	
SSCRS	F	0001C0	4	4192	
SSFPRS	D	000160	8	4190	
SSGRS	F	000180	4	4191	
SSMODEL	F	00010C	4	4187	
SSPREFIX	F	000108	4	4186	
SSPSW	F	000100	8	4185	
SSXSAA	A	0000D4	4	4181	
STFLDATA	F	0000C8	4	4154	
SVCICODE	H	00008A	2	4113	
SVCIID	F	000088	4	4109	
SVCIILC	X	000089	1	4111	
SVCIILCM	U	00000C	1	4112	
SVCNPSW	F	000060	8	4096	
SVCOPSW	F	000020	8	4068	4075
TEST01	I	00021A	4	3604	3594
TEST02	I	00025A	4	3628	3595
TEST03	I	00029A	4	3652	3596
TESTADDR	U	000FFF	1	3849	3879
TESTCCWA	A	000800	4	3868	3615 3639 3663
TESTCS	X	000805	1	3870	3617 3641 3665
TESTNUM	X	000FFF	1	3881	3604 3628 3652
TESTRES	H	000806	2	3871	3618 3642 3666
TESTRSLT	X	000800	8	3867	3620 3644 3668





DESC	SYMBOL	SIZE	POS	ADDR
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Entry: 0

Image	IMAGE	4096	000-FFF	000-FFF
Region	CODE	4096	000-FFF	000-FFF
CSECT	CCWILS	4096	000-FFF	000-FFF

STMT

FILE NAME

```
1 c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\CCW-ILS\CCW-ILS.asm
2 C:\Users\Fish\Documents\Visual Studio 2008\Projects\Hercules\_Git\_Harold\SATK-0\srcasm\satk.mac
```

```
** NO ERRORS FOUND **
```